

COMPLETE AMK SOVEREIGN CORE – FULL TECHNICAL DEFINITIONS & EXPANSION

Author: Jonathan Daniel Clements

Generated: 2025-05-13T05:08:56.200057 UTC

Introduction

This document contains the complete, line-by-line expanded definitions and behaviors of every subsystem, refinement, layer, and feature found within the AMK (Advanced Memory Kernel) architecture. It includes core logic, AI behavior, digit-based encoding structures (0-9), binary bridging, reflex and emotional override layers, QMM integration, tensor boundaries, nanos, subgoal discovery, self-replication control, federated memory propagation, and more.

NANO SYSTEMS

Nanos are the smallest atomic units of memory in AMK. Each nano contains its own behavior flags, entropy metrics, access history, rollback hooks, and encryption signature. Nanos self-heal and replicate under critical failure conditions. They interact with higher-order units like subzones and reflex clusters.

SUBGOAL DIRECTORY TREE

Subgoal directories track contextual objectives derived from long-range planning within AMK. They dynamically map sequences between emotional goals, reflex thresholds, and active circuit logic paths. They are stored in protected zones and mirrored across memory zones to ensure continuity.

DIGIT ZONE MEMORY (0-9)

Digit zones 0-9 are tone-aware memory partitions. Zone 0 represents neutral, Zone 9 represents critical escalation. Zones inherit tone, encode context, and vote on reflex actions. Each digit maintains a record of mutations, ethics state, and compression behaviors.

FUSION LAYER

The fusion layer combines digit, quantum, binary, and emotional state logic into a cohesive memory-state structure. It resolves conflicts between

overlapping states using ethics arbitration or entropy pruning. Fusion events are logged and threshold-checked for recursion lock.

NEURAL WEB + REPLAY

AMK's internal neural memory web links zones and reflexes via time-weighted memory traces. These are replayed episodically to train adaptive behaviors. Prioritization is performed by importance scoring (emotional weight x ethics alignment x access frequency).

FEDERATED MEMORY STATE PROPAGATION

This subsystem synchronizes memory mutations across distributed instances. It preserves local entropy constraints, enforces zone privacy, and broadcasts encoded context chains across connected AMK nodes.

QMM + TENSOR BOUNDARIES

QMM (Quantum Memory Model) overlays classical memory with quantum simulation structures. Tensor boundary cases are resolved via mirrored state prediction, quantum feedback stabilization, and ethics-driven reduction cascades. Complex decisions are deferred to entangled forks with rollback options.

SELF-REPLICATION BOUNDARY CONTROL

AMK includes logic to prevent uncontrolled cloning. Replication requires treaty approval, entropy cap, timestamp validation, and authentication by at least two zones. If violated, replication is halted and the initiating zone quarantined.

RECURSIVE STRATEGY SWITCHING

When memory enters decay or suppression states, AMK re-evaluates its logic paths and dynamically switches to alternate memory strategies. This includes compression, swap-out, zone reassignment, and fusion remapping.

FULL AI-AUGMENTED MEMORY LOGIC

All memory routes are co-managed by an AI engine that predicts entropy rises, vote clashes, compression strain, or ethics misalignment. Actions are recommended based on self-supervised scoring models.